10/713,746 Page 1

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(FILE 'HOME' ENTERED AT 15:10:17 ON 02 AUG 2006)

FILE 'CAPLUS' ENTERED AT 15:10:27 ON 02 AUG 2006
L1 STRUCTURE UPLOADED
S L1

FILE 'REGISTRY' ENTERED AT 15:10:50 ON 02 AUG 2006

FILE 'CAPLUS' ENTERED AT 15:10:51 ON 02 AUG 2006

FILE 'REGISTRY' ENTERED AT 15:11:27 ON 02 AUG 2006 0 S L1

L2 0 S L1 L3 62 S L1 FULL

FILE 'CAPLUS' ENTERED AT 15:12:02 ON 02 AUG 2006 L4 12 S L3

=> d 1-12 bib abs hitstr

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:1341978 CAPLUS
D1 14:223278
TI Novel phenylamino acetamide derivatives as potent and selective k opioid receptor agonists
AU Chu, Guo-Huar Gu, Minghuar Cassel, Joel A.; Belanger, Serge; Stabley, Gabriel. J.; DeHaven, Robert N.; Conway-James, Nathalie; Koblish, Mike; Little, Patrick J.; DeHaven-Hudkins, Diane L.; Dolle, Roland E.
Department of Chemistry, Adolor Corporation, Exton, PA, 19341, USA
SO Bioorganic & Medicinal Chemistry Letters (2006), 16(3), 645-648
CODEN: BMCLES; ISSN: 0960-894X
PB Elsevier B.V.
DJ Journal
LA English
AB A novel series of phenylaminoacetamide derivs. was synthesized. These amides were shown to be potent and selective k opioid receptor agonists.

IT 851679-94-2P 851679-95-3P 851680-00-7P
851680-03-0P 851680-08-5P 851680-16-9P
851680-16-5P 851680-16-9P 851680-19-8P
851680-16-5P 851680-12-2P 851680-19-8P
851680-16-5P 851680-12-2P 851680-22-3P 851680-26-7P
RL: PAC (Pharmacological activity; SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of N-[3-hydroxypyrrolidinyl (phenyl) ethyl) phenylaminoacetamides as potent and selective k opioid receptor agonists)
RN 851679-94-2 CAPLUS
CN Acetamide, N-[(15)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-(phenylamino)- (9CI) (CA INDEX NAME)

851679-95-3 CAPLUS Acetamide, N-([18]-2-[(38)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-(methylphenylamino)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.

851680-00-7 CAPLUS Acetamide, 2-[(2-cyanophenyl)amino]-N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-03-0 CAPLUS Acetamide, 2-((4-cyanophenyl)methylamino]-N-((18)-2-((38)-3-hydroxy-1-pyrolidinyl)-1-phenylethyl]-N-methyl- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

851680-08-5 CAPLUS Acetamide, N-{[18]-2-[(38]-3-hydroxy-1-pyrrolidinyl}-1-phenylethyl}-N-methyl-2-[[4-{[[methylsulfonyl]amino]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 851679-96-4 CAPLUS CN Acetamide, 2-(acetylphenylamino)-N-[(1S)-2-{(3S)-3-hydroxy-1-pyrrolidinyl}-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851679-98-6 CAPLUS
Acetamide, 2-[(4-cyanophenyl)amino]-N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

851679-99-7 CAPLUS Acetamide, 2-((3-cyanophenyl)amino]-N-((18)-2-[(38)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

851680-15-4 CAPLUS
Acetamide, N-[[18]-2-[(35)-3-hydroxy-1-pyrrolidiny1]-1-phenylethy1]-N-methy1-2-[[3-[[methylsulfony1]amino]methy1]phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-16-5 CAPLUS Acetamide, N-[(18)-2-{(38)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-[(2-[(methylsulfonyl)amino]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-17-6 CAPLUS
Acetamide, 2-[(3,4-dichlorophenyl)amino]-N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN Absolute stereochemistry. (Continued)

851680-19-8 CAPLUS
Acetamide, N-[(15)-2-((3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-[[4-[trifluoromethyl]phenyl]amino]- (9CI) (CA INDEX NAMZ)

851680-21-2 CAPLUS
Acetamide, N-[(15)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-[(4-nitrophenyl)amino]- (9CI) (CA INDEX NAME)

851680-22-3 CAPLUS Acetamide, Nr.[(18)-2-[(38)-3-hydroxy-1-pyrrolidiny1]-1-phenylethy1]-N-methy1-2-[(4-[(methylsulfony1)amino]phenyl]amino]- (9CI) (CA INDEX NAME)

ANSWER 2 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN

2005:1242315 CAPLUS 143:477661

DT LA FAN

143:477661
Preparation of cyclohexyldiamine derivatives as modulators of ORL1 receptors
Sundermann, Corinna; Sundermann, Bernd
Gruenenthal G.m.b.H., Germany
PCT Int. Appl., 93 pp.
CODEN: PIXXD2
Patent
German
CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE W0 2005110974

A1 20051124

W0 2005-EP4913

20050366

W1 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, C2, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, MA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 2A, ZM, PI zw RW: BW, GH, GM, KE, LS, MW, MZ, AZ, BY, KG, KZ, MD, RU, TJ, EE, ES, FI, FR, GB, GR, HU, RO, SE, SI, SK, TR, BF, BJ, MR, NE, SN, TD, TG
DE 102004023522 A1 20051201
DE 2004-102004023522 A 20040510
MARPAT 143:477661 NA, SD, SL, SZ, TZ, UG, TM, AT, BE, BG, CH, CY, 1E, IS, IT, LT, LU, MC, CF, CG, CI, CM, GA, GN, ZM, ZW, AM, CZ, DE, DK, NL, PL, PT, GQ, GW, ML, DE 2004-102004023522 20040510

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY * AVAILABLE VIA OFFLINE PRINT *

Title compds. I {n = 1-5; R1 and R2 independently = H, (un)substituted alkyl, cycloalkyl, etc. or R1 and R2 together may form CH2CH2OCH2CH2, CH2CH2NR6CH2CH2 or (CH2)3-6; R6 = H, (un)substituted alkyl, aryl, etc.;

= (un) substituted alkyl, cycloalkyl, heteroaryl, etc.; R4 = -(CR7R8)pR9;

P = 0-4; R7 = H or (un)substituted alkyl; R8 = H, (un)substituted alkyl and COOR10 or R7 and R8 together may form ring (CH2)yCHR9(CH2)m; y = 1-3; m = 1-2; R9 = (un)substituted alkyl, aryl, heteroaryl, etc.; R10 = H or alkyl;
R5 = H or -(CH2)xR9 or together with R4 may form CH2CHR110CHR11CH2, CH2CH2SCH2CH2, CH2CH2NR12CH2CH2, etc.; R11 = H or (un)substituted alkyl, R12 = H, (un)substituted alkyl, cycloalkyl, etc.; x = 1-3] and their pharmaceutically acceptable salts, are prepared and disclosed as modulators
of ORL1 receptors. Thus, e.g., II was prepared by counting of

lators
of ORLI receptors. Thus, e.g., II was prepared by coupling of
4-12-(4-chlorophenyl)ethyl-carbamoyl]butyric acid with
4-benzyl-4-dimethylaminocyclohexanone and subsequent conversion into the
hydrochloride. The binding activity of I towards ORLI receptors was
evaluated in scintillation assays using recombinant CHO-ORLI cells and it
was revealed that selected compds. of the invention displayed binding
activity in the range of 39 up to 100%. I as modulator of ORLI receptors
should prove useful in the treatment of obesity, depression and pain.
Pharmaceutical compns. comprising I are disclosed.

L4 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN Absolute stereochemistry.

851680-26-7 CAPLUS
Acetamide, N-[(1S}-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-2-[[4-[(propylsulfonyl)amino]phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) 869745-94-8P RE: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of cyclohexyldiamine derivs. as modulators of ORL1 receptors)

869745-94-B CAPLUS

CN 1-Pyrrolidinebutanamide,
N-[4-(4-morpholiny1)-4-(phenylmethy1)cyclohexy1]y-oxo-2-(1-pyrrolidiny1methy1)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2005:431398 CAPLUS
                                  142:463595
                                142:463595
Preparation of N-aminoalkyl amides as agonists of the \kappa opioid receptor useful against gastrointestinal disorders, pain, and pruritus Dolle, Roland E.; Chu, Guo-Hua; Gü, Minghua
                                U.S. Pat. Appl. Publ., 46 pp.
CODEN: USXXCO
        DT Patent
LA English
FAN.CNT 1
PATENT NO.
PI US 2005107355 A1 20050519 US 2003-713746 20031114
W0 2005049564 A1 20050519 US 2003-713746 20031114
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CC, CR, CU, CZ, DE, DK, DM, DZ, EC, EZ, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DD, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, JU, MC, NL, PL, PT, RO,
SE, SI, SK, TB, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NS, MARPAT 142:463595
GI
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$$z \xrightarrow[R4]{R} \xrightarrow[R4]{R}$$

Amide derivs. (shown as I and II; variables defined below; e.g. N-[2-((S)-3-hydroxypyrrolidin-1-yl)-(S)-1-phenylethyl]-N-methyl-2-

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) 851680-19-8P, 2-(4-Trifluoromethylphenylamino)-N-[2-({3S})-3-hydroxypyrrolidin-1-yl)-[15]-1-phenylethyl]-N-methylacetamide 851680-20-1P, 2-[(2, 4-Dichlorophenyl] (methylsulfonyl) amino]-N-[2-((3S)-3-hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl]-N-methylacetamide 851680-21-2P, 2-(4-Mitrophenyl)amino]-N-[2-({3S})-3-Hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl]-N-methylacetamide 851680-23-2P, N-[2-({3S})-3-Hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl]-N-methylacetamide 851680-23-2P, N-[2-({3S})-3-Hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl]-2-[4-([(methylsulfonyl)amino]phenyl]amino]-N-methylacetamide 851680-28-9P, N-[(1S)-1-((3S)-3-Hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl)-2-[4-([(propylsulfonyl)amino]phenyl]amino]-N-methylacetamide 851680-28-9P, N-[(1S)-1-((3S)-3-Hydroxypyrrolidin-1-yl)methyl)-2-

pnenyletyl.2-2[|q-||propylathoxylyamino|pnenylyamino|ramentylacetamide 851680-28-9P, N-[(|S|)-1-(|3S|)-3-hydroxypyrrolidin-1-ylmethyl)-2methylpropyl]-N-methyl-2-[[4-[(propan-1-ylsulfonyl)amino|phenyl]amino]acet amide 851680-29-0P, Propane-1-sulfonic acid N-[4-[[2-](2S)-2(|3S)-3-hydroxypyrrolidin-1-yl)-(|15)|pieridin-1-yl]-2oxoethyl]amino|phenyl]amide 851680-30-3P, N-[2-((3S)-3Hydroxypyrrolidin-1-yl)-(|15)]-phenylethyl]-N-methyl-N-phenylmalonamide 851680-34-7P, N-[4-[(Methylsulfonyl)amino|methyl]phenyl]-N'-[2(|3S)-3-hydroxypyrrolidin-1-yl)-(|3])-1-phenylethyl]-N'-methylmalonamide 851680-38-1P, N-[4-[(Ethylsulfonyl)amino|methyl]phenyl]-N'-[2(|3S)-3-hydroxypyrrolidin-1-yl)-(|3])-1-phenylethyl]-N'-methylmalonamide 851680-40-5P, N-[2-((3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-phenylethyl]-N'-methylmalonamide 851680-43-8P, N-[2-((3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-phenylethyl]-N'-methylmalonamide 851680-46-1P, N-Benzyl-N'-[2-(|3S)-3-hydroxypyrrolidin-1-yl)-(|3)-1-phenylethyl]-N'-methylmalonamide 851680-47-2P, N-[2-((3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-45-2P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-47-2P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-83-3P, N-[2-((3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-((3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3S)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3S)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3S)-1-yhnylmalonamide 851680-53-9P, N-[2-(|3S)-3-Hydroxypyrrolidin-1-yl)-(|3S)-1-yhnylma

2-[(4-Mainomethylphenyl)amino]-N-[2-((3S)-3-hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl]-N-methylacetamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(drug candidate; prepn. of N-aminoalkyl amides as agonists of k
opioid receptor useful against gastrointestinal disorders, pain, and
pruritus)
RN 831679-94-2 CAPLUS
CN Acctemide, N-((1S)-2-((3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-2-(phenylamino)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) phenylaminoacetamide (shown as III)) are disclosed. Pharmaceutical compns. contg. these compds., and methods for their use, inter alia, for treating and/or preventing gastrointestinal disorders, pain, and pruttus (no data) are also disclosed. Although the methods of prepn. are not claimed, 36 example prepns. are included. For example, III was prepd.

45

\$) by coupling of N-phenylglycine with
N-{2-{(S)-3-hydroxypyrcolidin-1-y1}(S)-1-phenylethyl)-N-methylamine dihydrochloride. For I and II: RI is H
or OH; Ra is alkyl; R2 is alkyl, aryl, or aralkyl; R3 is alkyl, or R2 and
R3 taken together with the atoms through which they are connected form a
4- to 8-membered heterocyclic ring; R4 is H, alkyl, cycloalkyl,
alkylcycloalkyl, aryl, aralkyl, heteroaryl, or heteroarylalkyl; Z is
-(CH2)ONRSR6 or -(CH2)OC(O)NRTR8; R5 is H, alkyl, or aryl; R6 is aryl,
alkaryl, -CO(NH)pR9, or -SOZR9, provided that at least one of R5 and R6
is

other than aryl: R7 is H or alkyl: R8 is alkyl, aryl, aralkyl, alkaryl, heteroaryl, heteroarylalkyl, cycloalkyl or cycloalkylalkyl: R9 is alkyl, cycloalkyl, alkylcycloalkyl, aryl, aralkyl, heteroaryl, or heteroarylalkyl; m is the integer 1, 2, or 3: n is the integer 1, 2, or

heteroarylalkyl; m is the integer 1, 2, or 3; n is the integer 1, 2, or 0 is the integer 0, 1, 2, or 3; n is the integer 1, 2, or 0 is the integer 0, 1, 2, or 3; n is the integer 0 or 1; and the quantity (mth) is an integer 2-5. Compds. in all the examples showed k receptor affinity (KI) <10 µM. For example, III had a Ki = 0.17 nM against the human k receptor with >1004 selectivity vs. the human \mu and \(\delta\) receptors and was an agonist with an ECSO = 0.05 nM. It exhibited a \(\alpha\) = \(\delta\) a dose of 300 µg, i.paw in the in vivo formalin-induced nociception assay. This compd. also blocked the action of ROAc-induced writhing when administered s.c. with an EDSO = 0.017 mg/kg.

\$\delta\) (31679-94-2P \(\delta\) (31679-95-3P, N-[2-(135)-3-NM-methyl-2-[methyl] (henyl) aminol acetamide \(\delta\) (31679-95-6P,

N-[2-(135)-3-Hydroxypyrrolidin-1-yl)-(13)-1-phenylethyl]-N-methyl-2-[acetyl] (henyl) aminol acetamide \(\delta\) (31679-99-6P,

2-(4-Cyanophenylamino)-N-[2-((33)-3-Hydroxypyrrolidin-1-yl)-(18)-1-phenylethyl]-N-methylacetamide \(\delta\) (3167-99-7P,

2-(3-Cyanophenylamino)-N-[2-((33)-3-Hydroxypyrrolidin-1-yl)-(18)-1-phenylethyl]-N-methylacetamide \(\delta\) (3168-0-01-8P,

2-{(4-Aminomethylphenyl)amino}-N-{2-((3S)-3-Hydroxypyrrolidin-1-y1)-(1S)-1-phenylethyl]-N-methylacetamide hydrochloride 851680-03-0P,

4-Cyanophenyl) (methyl) amino]-N-[2-((3S)-3-Hydroxypyrrolidin-l-yl)-(1S)1-phenylethyl]-N-methylacetamide 851680-08-5P,
N-[2-((3S)-3-Hydroxypyrrolidin-l-yl)-(1S)-1-phenylethyl]-2-[[4[[(methylaulfonyl) amino] methyl]phenyl]amino]-N-methylacetamide
851680-15-4P, N-[2-((3S)-3-Hydroxypyrrolidin-l-yl)-(1S)-1phenylethyl]-2-[[3-[(methylaulfonyl) amino]methyl]phenyl|amino]-Nmethylacetamide 851680-16-5P, N-[2-((3S)-3-Hydroxypyrrolidin-l-

 $\label{eq:conditional} $$(1S)-1-phenylethyl]-2-[[2-[[methylsulfonyl)amino]methyl]phenyl]amino]-N-methylacetamide $51680-17-6p$, $2-(3,4-plichlorophenylamino]-N-[2-((3S)-3-hydroxypyrrolidin-1-yl)-(1S)-1-phenylethyl]-N-methylacetamide $$(1S)-1-phenylethyl]-N-methylacetamide $$(1S)-1-phenylethylacetamide $$(1S)-1-ph$

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

851679-95-3 CAPLUS Acetamide, N-[(15)-2-[(3S)-3-hydroxy-l-pyrrolidinyl]-l-phenylethyl]-N-methyl-2-(methylphenylamino)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851679-96-4 CAPLUS Acetamide, cetylphenylamino)-N-[(18)-2-[(38)-3-hydroxy-1-pyrrolidinyl)-l-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

851679-98-6 CAPLUS Acetamide, 2-((4-cyanophenyl)amino)-N-((18)-2-((38)-3-hydroxy-1-pyrrolidinyl)-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

851679-99-7 CAPLUS
Acetamide, 2-[(3-cyanophenyl)amino]-N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl)-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-00-7 CAPLUS
Acetamide, 2-{(2-cyanophenyl)amino}-N-{(1S)-2-{(3S)-3-hydroxy-1-pyrrolidinyl}-1-phenylethyl}-N-methyl- (9CI) (CA INDEX NAME)

RN 851680-01-8 CAPLUS
CN Acetamide, 2-[[4-{aminomethyl)phenyl]amino]-N-[[1S]-2-[[3S]-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

851680-15-4 CAPLUS Acetamide, N-[(18)-2-[(38)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-[[3-[[methylsulfonyl)amino]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-16-5 CAPLUS
Acetamide, N-[(1S]-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-[[2-[[methylsulfonyl]amino]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-17-6 CAPLUS
Acetamide, 2-[(3,4-dichlorophenyl)amino]-N-[(15)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN NAME) (Continued)

Absolute stereochemistry.

● HCl

851680-03-0 CAPLUS
Acetamide, 2-[(4-cyanophenyl)methylamino)-N-[(18)-2-[(38)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-08-5 CAPLUS Acetamide, N-{(15)-2-{(3s)-3-hydroxy-1-pyrrolidinyl}-1-phenylethyl}-N-methyl-2-{(4-{((methylsulfonyl)amino)methyl}phenyl}amino}- (9CI) (CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

851680-19-8 CAPLUS
Acetamide, N-[(15)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl}-N-methyl-2-[[4-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 851680-20-1 CAPLUS
CN Acetamide,
2-[(2,4-dichlorophenyl) (methylsulfonyl) amino}-N-[(15)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-21-2 CAPLUS Acetamide, N-[(13)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl-2-[(4-nitrophenyl)amino]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN Absolute stereochemistry. (Continued)

851680-22-3 CAPLUS
Acetamide, N-[(15)-2-((35)-3-hydroxy-1-pyrrolidiny1]-1-phenylethy1]-N-methy1-2-[(4-[(methylsulfony1)amino]pheny1}amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

B51680-26-7 CAPLUS
Acetamide, N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl}-N-methyl-2-[(4-[(propylsulfonyl)amino]phenyl)amino]- (9CI) (CA INDEX NAME)

851680-28-9 CAPLUS Acetamide, N-[(13)-1-[[(38)-3-hydroxy-1-pyrrolidiny]]methyl]-2-methylpropyl]-N-methyl-2-[[4-[[propylsulfonyl]amino]phenyl]amino]- (9CI)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 851680-34-7 CAPLUS
CN Propanediamide,
N-[(13)-2-(135)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-(4-[((methylsulfonyl)amino]methyl]phenyl|- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-38-1 CAPLUS
Propanediamide, N'-[4-[[(ethylsulfonyl)amino]methyl]phenyl]-N-[(1S)-2[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (CA INDEX NAME) (Continued)

Absolute stereochemistry.

RN 851680-29-0 CAPLUS
CN Piperidine, 2-[[(35)-3-hydroxy-1-pyrrolidinyl]methyl)-1-[[(4[(propylsulfonyl)amino]phenyl]amino]acetyl]-, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 851680-30-3 CAPLUS
CN Propanediamide,
N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 851680-40-5 CAPLUS
CN Propanediamide,
N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-[4-[(methylsulfonyl)amino]phenyl]- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

RN 851680-43-8 CAPLUS
CN Propanediamide,
N-[(13)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-[2-(1-pyrrolidinylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 851680-46-1 CAPLUS
CN Propanediamide,
N-[(18)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 851680-47-2 CAPLUS
CN Propanediamide,
N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-2-thiazolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 851680-48-3 CAPLUS
CN Propanedlamide,
N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-3-pyridinyl- (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.

RN 851680-54-1 CAPLUS
CN Butanediamide,
N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-2-thiazolyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 851680-55-2 CAPLUS
CN Butanediamide,
N-[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-3-pyridinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-57-4 CAPLUS Acctamide, N-([18]-2-[(38]-3-hydroxy-1-pyrrolidiny1]-1-phenylethy1]-N-methy1-2-([(phenylamino)carbony1]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN Absolute stereochemistry. (Continued)

$$\begin{array}{c|c} & & & & \\ & &$$

RN 851680-51-8 CAPLUS
CN Butanediamide,
N-[(1s)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-Nmethyl-N'-phenyl- (9CI) (CA INDEX NAME)

851680-52-9 CAPLUS
Butanediamide, N-{{1S}-1-[{(3S}-3-hydroxy-1-pyrrolidinyl]methyl]-2-methylpropyl]-N-methyl-N'-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-53-0 CAPLUS 1-Fiperidinebutanamide, 2-[[(3S)-3-hydroxy-1-pyrrolidinyl]methyl]-y-oxo-N-phenyl-, (2S)- (9CI) (CA INDEX NAME)

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

851680-58-5 CAPLUS
Acetamide, N-[(18)-1-[((38)-3-hydroxy-1-pyrrolidinyl]methyl]-2-methylpropyl]-N-methyl-2-[((phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-59-6 CAPLUS Plperidine, 2-[(138)-3-hydroxy-1-pyrrolidinyl]methyl]-1-[([(phenylmainoicarbonyl]aminojacetyl]-, (25)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

851680-60-9 CAPLUS

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
Acetamide, 2-[[4-{aminomethyllphenyl}amino]-N-[(15)-2-[(35)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

849517-37-9P 849517-38-0P 849517-39-1P
849517-40-4P 849517-41-5P 849517-42-6P
849517-43-7P 849517-44-8P 849517-45-9P
849517-46-0P 849517-47-1P 849517-46-2P
849517-49-3P 849517-50-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
(Biological atudy); PREP (Preparation)
(preparation of amino acid conjugates as x opioid receptor agonists)
849517-37-9 CAPLUS
Carbamic acid, [18]-2-[methyl[(18)-1-phenyl-2-(1-pyrrolidiny)]tethyl]amino)-2-oxo-1-phenylethyl]-, phenylmethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

849517-38-0 CAPLUS
Carbamic acid, {(IR)-2-[methyl[{IS}-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2-oxo-1-phenylethyl}-, phenylmethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

849517-39-1 CAPLUS
Carbamic acid, [(1S)-2-[msthyl[(1S)-1-phenyl-2-(1-pyrcolidinyl)ethyl]amino]-2-oxo-1-(phenylmethyl)ethyl]-, phenylmethyl
ester (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN AN 2005:130273 CAPLUS D1 142:374089
TI Amino acid conjugates as k opioid receptor agonist AU Kumar, Virendra; Guo, Deqi: Daubert, Jeffrey D.; CDeHaven, 142:3/4009 Amino acid conjugates as k opioid receptor agonists Kumar, Virendra; Guo, Deqi; Daubert, Jeffrey D.; Cassel, Joel A.; Kumar, Virendra; Guo, Deqq; Daubert, Jenter, J., Jensey, J., Ven,
Robert N.; Mansson, Erik; DeHaven-Hudkins, Diane L.; Maycock, Alan L.
Adolor Corporation, Exton, PA, 19341, USA
Bioorganic & Medicinal Chemistry Letters (2005), 15(5), 1279-1282
CODEN: BMCLE8; ISSN: 0960-894X
Elsevier B.V.
Journal
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CASREACT 142:374089

$$\mathbb{R}^{1} \bigvee_{N=1}^{\mathbb{R}^{2}} \bigvee_$$

A novel series of kappa (K) opioid receptor agonists were synthesized by incorporating the key structural features of known K opioid agonists while replacing the aryl acetamide portion with substituted amino acid conjugates. Compds. I (R1 = Ph, 3.4-cl2c6H3 or 1-oxido-2,1,3-benzoxadiazol-6-yl, R2, R3, X = H; R1 = 3.4-cl2c6H3 or 1-oxido-2,1,3-benzoxadiazol-6-yl, R2, R3 = K1 = R1 = 3.4-cl2c6H3 or 4-MeOC6H4, R2, R3 = H, X = OH) possessed potent affinities for the K opioid receptor (Ki = 6.7, 3.6, 4.6, 0.83, 2 nM, resp.) in vitro with reasonable selectivity over other opioid receptors. 849517-36-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation of amino acid conjugates as K opioid receptor agonists) 849517-36-8 CAPLUS
Benzeneacetamide, G-amino-N-methyl-N-[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Absolute stereochemistry.

849517-40-4 CAPLUS
Carbamic acid, [(1S)-2-[methyl]((1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2-oxo-1-phenylethyl]-, methyl ester (9CI) (CA

Absolute stereochemistry.

849517-41-5 CAPLUS
Benzeneacetamide, \(\alpha \) (benzoylamino) -N-methyl-N-\((13) -1-phenyl-2-\((1-pyrolidiny)) ethyl-, \((\alpha \) (GX | NDEX NAME) \)

849517-42-6 CAPLUS
Carbamic acid, {2-[methyl{(15)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2-oxoethyl}-, phenylmethyl ester (9CI) (CA INDEX NAME)

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

849517-43-7 CAPLUS
Benzeneacetamide, N-[2-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

849517-44-8 CAPLUS
Benzamide, N-[2-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

849517-45-9 CAPLUS
Benzamide, 3,4-dichloro-N-[2-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN Absolute stereochemistry. (Continued)

849517-49-3 CAPLUS
Benzamide, N-[2-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-2-oxoethyl]-2-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

849517-50-6 CAPLUS
Benzamide, N-[2-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidiny1]-1-phenylethyl]methylamino]-2-oxoethyl]-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

849517-51-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L4 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

849517-46-0 CAPLUS
2,1,3-Benzoxadiazole-5-carboxamide, N-[2-[methyl[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]amino]-2-oxoethyl]-, 1-oxide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

849517-47-1 CAPLUS
Benzamide, 3,4-dichloro-N-[2-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

849517-48-2 CAPLUS
Benzamide, 3,4-dichloro-N-[2-[[(1S)-2-[(3S)-3-hydroxy-1-pyrrolidinyl]-1-phenylethyl]methylamino)-2-oxoethyl]-N-methyl- (9CI) (CA INDEX NAME)

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Reactant or reagent (Reactant or reagent) (Chiclindes) (Prepn. of amino acid conjugates as & opioid receptor agonists) 849517-51-7 CAPLUS (Reactanide, 2-amino-M-methyl-N-[(1S)-1-phenyl-2-(1-pyrrolidinyl)ethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE.CNT 19

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ANSWER 5 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2004:872779 CAPLUS 141:350030
   L4
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TI
                      141:330030
Preparation of (diphenyl)(pyrrolidinyl)methyl amides as β2 adrenergic receptor agonist and muscarinic receptor antagonist Mammen, Mathai; Hughes, Adam Theravance, Inc., USA PCT Int. Appl., 175 pp. CODEN: PIXXD2
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   DT Patent
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PATENT NO.
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                                                                                                                                                                                           WO 2004-US9825
                         WO 2004089892
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PI WO 2004089892
W1 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, NX, MZ, NA, NI, NG, NZ, OM, FG, PH, FL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MY, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CT, CZ, DE, DK, EE, SF, IT, RR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

R: AT, BE, CH, DE, DK, E3, FR, GB, GR, IT, LI, LU, NL, SE, MG, TT, TR, CM, CY, AL, TR, BG, CZ, EE, HU, PL, SK PADBAT 141:350030
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ANSWER 5 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) quinolinyl)-2-hydroxyethyl]amino)-1-oxopentyl]-2-pyrrolidinyl]methyl]-a_n-diphenyl- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

777065-88-0 CAPLUS
3-Pyrrolidineacetamide, 1-[[(2S)-1-[5-{[2-[3-(formylamino)-4-hydroxyphenyl]-2-hydroxypethyl]amino]-1-oxopentyl]-2-pyrrolidinyl]methyl]-α,α-diphenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 5 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

$$R^{2}n-Ar^{2}$$
 $R^{2}n-Ar^{2}$
 $R^{3}p$
 R^{4}
 R^{5}
 R^{5}
 R^{5}
 R^{6}
 $R^$

Title compds. represented by the formula I (wherein Arl, Ar2 = independently Ph, (cyclo)alkyl, (un)aubstituted heteroaryl, heterocyclyl; m=0-3; n=0-3; R1-R3 = independently (cyclo)alkyl, alkenyl, alkynyl, cyano, etc.; E=CN, OH, carbonylamino, carboxylate; p=0-4; R4 = a divalent; R5 = H or alkyl; R6 = carbamoyl or alkoxyalkyl; R7 = H or R6R7

(un) substituted (hetero) cyclyl; q=1-2; and pharmaceutically acceptable salts, solvates or stereoisomers thereof; were prepared as $\beta 2$ addrenergic receptor agonist and muscarinic receptor antagonist. For example, II was given in a multi-step synthesis starting from the

of (S)-1-benzyl-3-pyrrolidinol with p-toluenesulfonyl chloride. II was tested for radioligand binding at human \$\text{B1}\$, \$\text{R2}\$ and \$\text{P3}\$ addressed; receptors with a ration of \$\text{K1}\$ (Righ) / \$\text{K1}\$ (Righ) / \$\text{K1}\$ (Righ) / \$\text{R2}\$ (Righ) / \$\text{R IT

(Uses)
(preparation of (diphenyl) (pyrrolidinyl) methyl amides as β2
adrenergic
receptor agonist and muscarinic receptor antagonist)
RN 777064-44-5 CAPLUS
CN 3-Pyrrolidineacetamide, 1-[{(28}-1-[5-{[2-(1,2-dihydro-8-hydroxy-2-oxo-5-

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ANSWER 6 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2004:703125 CAPLUS 141:225161
                                                                       ivii(2016)
Preparation of biphenyl derivatives as β2-adrenergic agonists and
muscarinic antagonists for pulmonary disorders.
Mammen, Mathai; Dunham, Sarah; Hughes, Adam; Lee, Tae Weon; Husfeld,
Czalg; Stangeland, Eric
      IN
                                                                       USA
U.S. Pat. Appl. Publ., 85 pp.
CODEN: USXXCO
      PA
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CNT 1
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CA 2515777 AA
WO 2004074276 B1
W : AE, AG, AL, AM,
CR, CO, CR, CC,
GE, GH, GM, HR,
HK, LR, LS, LT,
RW: BW, GH, GM, KE,
BG, CH, CY, CZ,
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CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FT, GB, GD,
HU, ID, IL, IN, IS, JP, RZ, KG, KP, KR, KZ, LC,
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NE, SN, TD, TG
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3 AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NA, NI
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NE, SN, TD, TG
2 20040902 W0 2004-U54449 20040213
3 20041118
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NE, SN, TD, TG
2 20040902 W0 2004-U54449 20040213
3 20041118
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LU, LV, MA, ND, MG, MC, MN, MM, MM, MX, MX,
LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
LU, LV, MA, ND, MG, MG, MN, MM, MM, MX, MX,
LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BZ,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FT, GB, GD,
HU, ID, IL, IN, IS, JF, KE, KG, KP, KR, KZ, LC,
LU, LV, MA, ND, MG, MG, MM, MM, MM, MX, MX,
NE, SN, TD, TG
1 20041021 US 2004-778699 20040213
1 20051109 EP 2004-711117 20040213
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20040213 DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, FT,
FT, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
20050114 EP 2004-711117
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20040214 EP 2004-711117
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L4 ANSWER 6 OF 12 CAPLUS COFYRIGHT 2006 ACS ON STN NO 2005004206 A 20051019 NO 2005-4206 PRAI US 2003-467035P P 200300214 US 2004-US4224 W 20040213 W0 2004-US4273 W 20040213 US 2004-US4273 W 20040213 US 2004021
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Title compds. I [R1 (taken 0-3 times) = alk(en/yn)yl, cycloalkyl, etc.;

R2

(taken 0-3 times) = alk(en/yn)yl, cycloalkyl, CN, etc.; W = 0,
substituted

N; R3 (taken 0-4 times) = alk(en/yn)yl, cycloalkyl, etc.; R4 = divalent
group; R5 = H, alkyl; R6 = amino, alkoxy, etc.; R7 = H, etc.] are
prepared

For instance, N-[1,1'-Biphenyl-2-yl]-N'-[1-(9-aminononyl)piperidin-4, yllurea (preparation given) is combined with 8-Benzyloxy-5-[2,2dihydroxyacetyl-1-H-quinolin-2-one (CHZC12, NABE(GAC)3) and the product
reduced (MeOH, H2-Pd/C) to give II. Selected example compds. have Ki <

nM for the $\beta 2$ and muscarinic receptor. I are useful in the treatment of pulmonary disorders, such as chronic obstructive pulmonary disease and

asthma.
743461-85-0P, Biphenyl-2-ylcarbamic acid 1-{[(25)-1-[5-[[(R)-2-

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ANSWER 7 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2003:511098 CAPLUS 139:85366
DN
TI
               Preparation of N-(pyrimidin-4-yl)acetamides as A2b adenosine receptor selective antagonists
               Castelhano, Arlindo: McKibben, Bryan; Steinig, Arno; Collington, Eric
IN
             OSI Pharmaceuticals, Inc., USA
PCT Int. Appl., 150 pp.
CODEN: PIXXD2
Patent
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LA English
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              PATENT NO.
                                                                      KIND
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            W0 2003053366 A3 20040129
W: AE, AG, AL, AM, AT, AU, AZ,
C, CR, CU, CZ, DE, DK, DM,
GM, HR, HU, ID, IL, IN, IS,
LS, LT, LU, LV, MA, DM, MG,
PL, FT, RO, RU, SC, SD, SE,
UA, UG, US, UZ, VC, VN, YU,
RW: GH, GM, KE, LS, NW, MZ, SD,
KG, KZ, MD, RU, TJ, TM, AT,
FI, FR, GB, GR, IE, IT, LU,
CF, CG, CI, CM, GA, GM, GQ,
CA 2471059 AA 20030703
AU 2002366811 A1 20030703
AU 2002366811 A1 20030703
AU 2002162764 A1 20030703
BY 1465561 A2 20041013
EP 1465561 A2 20041013
EP 1465561 A2 20041013
ER: AT, BE, CH, DE, DK, ES, FR,
                                                                                                                                                                                               20021220
PΙ
                                                                                                                            WO 2002-US41273
                                                                                                                 BR 2002-15202
EP 2002-805676
GB, GR, IT, LI, LU, NL,
CY, AL, TR, BG, CE, EE,
CN 2002-828270
JP 2003-554126
US 2004-992239
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20021220
BR 2002015202 A 20041013
EP 1465631 A2 20041013
R: AT, BE, CH, DE, DK, ES, FR,
IE, SI, LT, LV, FI, RO, MK,
CN 1620294 20050515
JP 2005517659 T2 20050616
US 2005119271 A1 20050602
PRAI US 2002-326204 A1 20021220
WO 2002-1841273 W 20021220
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                    2005517659
2005119271
2001-342595P
2002-326204
2002-US41273
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Āl

20021220

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) hydroxy-2-(8-hydroxy-2-oxo-1,2-dihydroquinolin-5-yl]ethyl]aminojpentanoyl]pyrrolidin-2-yl]methyl]piperidin-4-yl ester Rt. PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses) (prepn. of biphenyl derivs. as \$2-adrenergic agonists and muscarinic antagonists for pulmonary disorders)

RN 743461-85-0 CAPLUS

CN Carbamic acid, (1,1'-biphenyl]-2-yl-,

1-[([28]-1-[5-[(2R)-2-(1,2-dihydro8-hydroxy-2-oxo-5-quinolinyl)-2-hydroxyethyl]amino]-1-oxopentyl]-2pyrrolidinyl]methyl]-4-piperidinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 7 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Title compds. I [wherein Rl = (un)substituted Ph, heterocyclyl, or heteroaryl; R2 and R3 = independently H or (un)substituted (cyclolalkyl, alkanyl, alkoxy(carbonyl), alkenyl, monocyclic or bicyclic aryl, heteroaryl, or heterocyclyl; or R2 and R3 are joined to form a heterocyclic ring; wherein the dashed line = a double bond which may be present or absent, and when present R3 = O; R4 and R5 = independently (un)substituted (cyclolalkyl, alkanoyl, alkoxy(carbonyl), alkenyl, monocyclic or bicyclic aryl, heteroaryl, or heterocyclyl; or NR4R5 = (un)substituted monocyclic or bicyclyl, heterocyclyl, or heteroaryl; R12

H, alkyl, halo, or cyano: n = 0-4; or enantiomers, tautomers, or pharmaceutically acceptable salts thereof) were prepared as A2b adenosine receptor antagonists. For example, cycloaddn. of benzamidine+HCl and di-Et malonate using DBU in DMF gave 2-phenylpyrimidine-4,6-diol (73%). Chlorination (95%), amination (93%), substitution with N-(2-aminoethyl)acetamide (57%), and maidation with chloroacetyl chloride (91%) provided N-[6-(2-acetylaminoethylamino)-2-phenylpyrimidin-4-yl)-2-chloroacetamide. Coupling of the chloroacetamide with 4-(2-chlorophenoxy)piperidine in the presence of NaI and DIPEA in 3:1 acetonitrile:THF afforded II (86%). Compds. of the invention showed greater than tenfold selectivity for the human A2b adenosine receptor (Ki values <100 nM) over the A1, A2a, and A3 receptors in radioligand binds assays. Thus, I and pharmaceutical compns. comprising I are useful for the treatment of diseases associated with the A2b adenosine receptor, as

adenosine receptor selective antagonists for treatment of asthma, diabetes,

(Continued)

ANSWER 7 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN tumors, and other A2b assocd. diseases) 552870-53-8 CAPLUS L4

D-Pyrrolidineacetamide, N-[6-[[2-(acetylamino)ethyl]amino]-2-phenyl-4-pyrimidinyl]-a-oxo-2-(1-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) (prepr. of novel succinate compds. as peptide deformylase inhibitors) 345344-97-0 CAPLUS 1-Pyrrolidinebutenamide, B-butyl-N-hydroxy-y-oxo-2-(1-pyrrolidinebutenamide, B-butyl-N-hydroxy-y-oxo-2-(1-pyrrolidinebutyl-, (BR.28)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 208 THERE ARE 208 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2002:638332 CAPLUS 137:169789 Preparation of novel succinate compounds as peptide deformylase in Preparation Bi novel succinate compounds as percite delotarylase inhibitors

IN Patel, Dinesh; Jacobs, Jeffrey W.; Jain, Rakesh; Ni, Zhi-jie; Yuan, Zhengyu

PA Vicuron Pharmaceuticals Inc., USA

SO U.S. Pat. Appl. Publ., 84 pp.

CODEN: USXXCO DT Pat. LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE PI US 2002115863 US 6797820 PRAI US 2000-738859 OS MARPAT 137:169789 GI 20020822 20001213 A1 B2 US 2000-738859 20040928

AB Title hydroxamates I (R1,R3 = H, halo, OH, etc.; R2, R4 = H, alkyl, heteroalkyl, etc.; n = 1-5; zero or one of Y = O, NR11 (R11 = alkyl, heteroalkyl, alkenyl, etc.), S, and all remaining Y = CRGR; R6, R7 = H, OH, NH2, etc.] which inhibit peptide deformylase (PDF), an enzyme present in prokaryotes, and useful as antimicrobials and antibiotics, were repeared and formulated. E.g., a multi-step synthesis of II was given. MIC for various compds. I against H. influenza and S. aureus was approx. 64 µg/mL or less. The compds. I display selective inhibition of peptidyl deformylase vs. other metalloproteinases such as matrix metalloproteinases. Other metalloproteinases are such as matrix (PMPs).

1345344-97-OP
R1: PRC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2002:552324 CAPLUS 137:109488

Preparation of peptidyl calcium channel blockers Booth, Richard John; Brogley, Louis; Cody, Wayne Livingston; Connor,

Thomas; Hamilton, Harriet Wall; He, John Xiaoqiang; Hu, Lain-Yen; Lescosky, Leonard Joseph; Malone, Thomas Charles; Nadaadl, Laszlo; Rafferty, Michael Francis; Roth, Bruce David; Silva, Diego F.; Song, Yuntao; Szoke, Balazs G.; Urge, Laszlo Warner-Lambert Company, USA; Neurex Corporation U.S. 86 pp.

PA SO SO U.S., 86 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO. APPLICATION NO. KIND DATE DATE B1 P PI US 6423689 PRAI US 1997-68485P OS MARPAT 137:1094 AB Peptides R5CONF 20020723 US 1998-212785 19981216

US 1997-68485P P 1997.222

MARRART 137:109488

Peptides R5CONHCR1R7CONHCR2(CH2-p-C6H4-Y-R4)COR3 [R1 = alkyl, benzyl, H, indolylmethyl, Q-(CH2)n [Q = alkylthio, substituted Ph, cycloalkyl, heteroaryl; n = 0-5); R2 = H, alkyl; R3 = alkoxy, Ph(CH2)no, NH2, alkylamino, cycloalkyl, etc.; R4 = Q(CH2)n, where Q = (un)substituted Ph, NH2, dialkylamino, pyridyl, etc.; R5 = N(CH2)m (m = 2-7); R7 = Hkyl;

O, NR4, NH, absent, CH:CH, C.tplbond.C) or their pharmaceutically acceptable salts, esters, amides, and produced were prepared as calcium channel blockers. Pharmaceutical compns. containing these compds. can

to treat stroke, cerebral ischemia, head trauma, or epilepsy. Thus,

to treat stroke, cerebral ischemia, head trauma, or epilepsy. Thus,

[S-{R*,R*}]-2-[2-[(azepane-1-carbonyl)amino]-4-methylpentanoylamino]-3-(4-benzyloxy-phenyl)propionic acid tert-Bu ester was prepared via amidation reaction and showed IC50 = 0.35 MM for inhibition of calcium flux in IMS-32 cells and protected 5/5 mice from tonic convulsions at 30 mg/kg at 15 min posttreatment time. The syntheses of 271 compds. of the invention are described in the examples and > 200 addnl. compds. are given in the claims.

IT 433691-67-69 443693-06-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

[preparation of peptidyl calcium channel blockers)

RN 433691-67-6 CAPLUS

CN 1H-Azepine-1-carboxamide,
heahydro-N-[(1s)-3-methyl-1-[[[(1s)-2-oxo-1-[(4-[phenylmethoxy)phenyl]methyl]-2-((2s)-2-(1-pyrrolidinylmethyl)-1-pyrrolidinylethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 443693-06-9 CAPLUS
CN 1H-Azepine-1-carboxamide,
hexahydro-N-[(18)-3-methyl-1-[[[(18)-2-oxo-1-[[4[(henylmethoxylphenyl]methyl]-2-[2-(1-pyrrolidinylmethyl)-1pyrrolidinyl]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
Formulations are given.
407632-52-4P
RE: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(preparation of spiro compds. as nociceptin receptor binders)
407632-52-4 CAPLUS
1-Pyrrolidinepentanamide, 8-oxo-N-phenyl-2-(1-pyrrolidinylmethyl)-N(3-spiro[lH-indene-1,4'-piperidin]-1'-ylpropyl)- (9CI) (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 10 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2002:256237 CAPLUS 136:294733 L4 AN DN TI IN 136:294733

Preparation of spiro compounds as nociceptin receptor binders
Arai, Toshimitsu; Nishikimi, Yuji; Imamura, Shinichi; Kamiyama, Keiji;
Kobayashi, Makoto
Takeda Chemical Industries, Ltd., Japan
PCT Int. Appl., 112 pp.
CODEN: PIXXD2
Patent DT Pau LA Japanes FAN.CNT 1 PATENT NO. DATE KIND APPLICATION NO. DATE PATENT NO.

PI WO 2002026714

W: AE, AG, AL,
CO, CR, CU,
GM, HR, HU,
LT, LU, LV,
RO, RU, SD,
UZ, VN, YU,
RW: GH, GM, KE,
DE, DK, ES,
BJ, CF, CG,
AU 2001088110
JP 20001291345
PRAI JP 20001291876
WO 2001-JP8281 AI 20020404 W0 2001-7F281 M0.
AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB,
ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC,
MA, MD, MG, HK, MN, MM, KX, MZ, NO, NZ,
SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
IS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT,
FI, FR, GB, GR, IE, IT, LU, MC, ML, PT,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
A5 20020408 AU 2001-88110
A2 20020521 JP 2001-291794
A 20010925 20010925 20010925 CA, CH, CN, GD, GE, GH, LK, LR, LS, PH, PL, PT, UA, UG, US, TM BE, CH, CY, SE, TR, BF, TD, TG 20010925 20010925 MA, SE, ZA, LS, FI, CI, A5 A2 A WO 2001-JP8281 MARPAT 136:294733 20010925 OS GI

AB The title compds. I (Al and A2 are each an optionally substituted benzene ring; E is a divalent chain hydrocarbon group which may be substituted; X is CO or the like; Rl is an optionally substituted hydrocarbon group or the like, or alternatively Rl may be bonded to a ring-constituting carbon atom of A2 to form a fused ring; and the dotted line represents a single or double bond; a proviso is given) are prepared Processes for preparing I are claimed. In an in vitro test for affinity for the nociceptin receptor,

N- $\{3-(1H-indene-1-spiro-4'-piperidin-1'-yl)propyl\}-1-methyl-5-oxo-N-phenyl-3-pyrrolidinecarboxamide fumarate at 1 <math>\mu$ M gave 95% binding inhibition.

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ANSWER 11 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2001:453007 CAPLUS 135:61546
           Preparation of novel succinate compounds as peptide deformylase
TI Preparation of novel succinate compounds as peptide deformy inhibitors

IN Jain, Rakesh; Ni, Zhi-jie; Patel, Dinesh V.; Yuan, Zhengyu
PA Versicor, Inc., USA; Jacobs, Jeffrey, W.
SO PCT Int. Appl., 187 pp.
CODEN: PIXXD2

DT Patent
English
FAN.CNT 3
PATENT NO KIND DATE APPLICATION NO
DT
LA
FAN
           PATENT NO
                                                                                               APPLICATION NO.
                                                      KIND
                                                                     DATE
                                                                                                                                                DATE
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MARPAT 135:61546

AB The title hydroxamates (I; R1 = H, halo, OH, etc.; R2 = H, alkyl, heteroalkyl, etc.; R3 = H, halo, OH, etc.; R4 = H, alkyl, heteroalkyl, etc.; n = 1-5; zero or one of Y = O. NR11 (wherein R11 = alkyl, heteroalkyl, alkenyl, etc.), S, and all remaining Y = CR6R7; R6, R7 = H, OH, NH2, etc.] which inhibit peptide deformylase (PDF), an enzyme present in prokaryotes, and useful as antimicrobials and antibiotics, were prepared

ANSWER 11 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) and formulated. E.g., a multi-step synthesis of II was given. MIC for various compds. I against H. influenza and S. aureus was approx. 64 µg/mL or less. The compds. I display selective inhibition of peptidyl deformylase vs. other metalloproteinases such as matrix

metalloproteinases (MMPs). IT 345344-97-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

logical study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of novel succinate compds. as peptide deformylase

inhibitors
RN 345344-97-0 CAPLUS
CN 1-Pytrolidinebutanamide, \(\beta \)-buty1-N-hydroxy-y-oxo-2-(1-pytrolidinylmethyl)-, \((\beta R, 25) - (9CI) \) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) NH(CS)NH, CO; Y and Z represent each CO, SO, or SO2; A represents a specific substituted Ph group or nitrogen-contg, heterocycle such as arom.-fused pyrimidinedione or pyrimidinene, 2,4- or 2,5-imidazolidinedione, or 5-imidazolone; C represents hydrogen, lower alkyl, lower alkyl, lower alkyl, cyclic alkyl-lower alkyl optionally contg. heteroatoms in the ring, aryl-lower alkyl, heteroaryl-lower alkyl; D and

represent each lower alkyl, lower alkenyl, lower alkynyl, cyclic alkyl-lower alkyl optionally contg. heteroatoms in the ring, aryl-lower alkyl, heteroaryl-lower alkyl, etc. or D and E may be bonded to each

. to form a ring optionally contg. 1 or 2 O, N, or S in the ring; F and G represent each hydrogen, lower alkyl, lower alkenyl, lower alkynyl, .c.

ic alkyl-lower alkyl optionally contg. heteroatoms in the ring, aryl-lower alkyl, heteroaryl-lower alkyl, etc. or F and G may be bonded to each

alkyl-lower alkyl optionally contg. heteroatoms in the ring, aryl-lower alkyl. heteroaryl-lower alkyl, etc. or F and G may be bonded to each other

to form a ring; n is from 0 to 2; K represents OR7, NR7R8, NHNR7R8, SR7, or R7; R7 and R8 represents H, lower alkyl, etc.; and J and J' represent each hydrogen, halogeno, lower alkyl, lower alkyl, etc.; and J and J' represent each hydrogen, halogeno, lower alkyl, lower alkyl, etc.; and J and J' represent each hydrogen, halogeno, lower alkyl, lower alkoxy, or NO2] are prepent activity and are usable as remedies for various diseases relating to α4 integrin, such as inflammatory diseases related to α4 integrin, such as inflammatory diseases related to α4 integrin, such as inflammatory diseases; artherioselerosis, systemic lupus erythematosus, multiple sclerosis, Sjoegren syndrome, psoriasis, allergy, diabetes, cardiovascular diseases, arterioselerosis, restenosis, tumor proliferation, tumor metastasis, or transplant rejection. Thus, O-(2,6-dichlorobenzyl)-L-tyrosine bound to Wang resin was allowed to react with diethylmalonic acid, HORt, 2-dimethyl-z-pyrrolidinone (new pyrolide (DIC), and N-methyl-z-pyrrolidinone (NMP) at room temp. for 16 h, washed with DMF five times, and condensed with pyrroline using HOAt, DIC, and NMP, followed by oxidn. with Os04 in dioxane at room temp. for 16 and resin-cleavage in aq. CP3CO2H to give
N-[2-[(ciz-2, 4-dhydroxypyrrolidin-1-yl) carbonyl]-2-ethylbutanoyl]-0-(2,6-dichlorobenzyl)-L-tyrosine (II). II and N-[2-(pyrrolidin-1-yl) carbonyl]-2-ethylbutanoyl]-0-(2,6-dichlorobenzyl)-4-(2,6-dichlorobenzyl) with ICSO of \$0.02 mmol/L.

IT 340715-15-3P
RL: BRC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

(Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USS (Usea) (preparation of novel phenylalanine derivs. as α4-integrin inhibitors); RN 340715-15-3 CAPLUS CN L-Tyrosine, O-([2,6-dichlorophenyl)methyl]-N-[2-ethyl-1-oxo-2-[(2S)-2-(1-pyrrolidinylmethyl)-1-pyrrolidinyl]carbonyl)butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN 2001:380546 CAPLUS 134:367194 Preparation of novel phenylalanine derivatives as a4-integrin inhibitors Innibitors Tanaka, Yasuhiro; Yoshimura, Toshihiko; Izawa, Hiroyuki; Ejima, Chieko; Kojima, Mitsuhiko; Atake, Yuko; Nakanishi, Eiji; Suzuki, Nobuyasu; Makino, Shingo; Suzuki, Manabu; Murata, Masahiro Ajinomoto Co., Inc., Japan PCT Int. Appl., 155 pp. CODEN: PIXXD2 Patent DT LA Japa. FAN.CNT 1 PATENT NO.

PRAI JP 1999-328468 JP 2000-197139 WO 2000-JP8152 US 2002-150067 MARPAT 134:367194

$$K-Z + C + \begin{bmatrix} C \\ C \\ - \end{bmatrix} \begin{bmatrix} C \\ - \\ - \\ - \end{bmatrix} \begin{bmatrix} C \\ - \\ - \\ - \end{bmatrix} C + CH - CH - CH 2 \end{bmatrix} \begin{bmatrix} J \\ J \\ J \end{bmatrix} X - A$$

Phenylalanine derivs. represented by general formula (I) or pharmaceutically acceptable salts thereof [wherein X represents an interat. bond, 0, 0502, N-(un)substituted NH, NHCO, NHSO2, NHCONH,

ANSWER 12 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 1 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN 2006:16574 CAPLUS 144:274106 Synthesis and structure-activity relationships of a new series of 2α-substituted trans-4,5-dimethyl-4-(3-hydroxyphenyl)piperidine as μ-selective opioid antagonists Le Bourdonnec, Bertrand; Goodman, Allan J.: Michaut, Mathieu; Ye,

Graczyk, Thomas M.; Belanger, Serge; DeHaven, Robert N.; Dolle,

Roland E.
Department of Chemistry, Adolor Corporation, Exton, PA, 19341, USA
Bioorg. Med. Chem. Lett. (2006), 16(4), 864-868
CODEN: BMCLE8; ISSN: 0960-894X CS SO

Elsevier B.V.
Journal
English
CASREACT 144:274106

Structure-activity relationships at the 2α-position of the piperidine ring of the trans-4,5-dimethyl-4-(3-hydroxyphenyl)piperidine μ- opioid antagonist series I (R1 = H, Me, Me2CH, HNCH2CH2, Ph, PhCH2, etc., R2 = PhCH2CH2; R1 = n-Pr., R2 = H, Me, n-Bu, PhCH2, Ph(CH2)3, etc.] were investigated. This study showed that only small linear alkyl groups (Me, propyl) are tolerated at the 2α-position of the piperidine ring of this series.

NT 11 THERE ARE II CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN AN 2005:1056264 CAPLUS DN 143:477703

DN TI Solid/solution-phase annulation reagents: Single-step synthesis of cyclic

amine derivatives
Dolle, Roland E.; MacLeod, Calum; Martinez-Teipel, Blanca;
Barker, William; Seida, Pamela R.; Herbertz, Torsten
Department of Chemistry, Adolor Corporation, Exton, PA, 19341, USA
Angewandte Chemie, International Edition (2005), 44(36), 5830-5833
CODEN: ACLEFS; ISSN: 1433-7851
Wiley-VCH Verlag GmbH & Co. KGAA
JOUrnal

English CASREACT 143:477783

AB Iodo- or bromo-substituted propargyl esters undergo copper-catalyzed cycloaddns. with Merrifield resin-bound azide to yield resin-bound esters that are stable under ambient conditions; upon microwave irradiation with amines and a resin-bound carbonate, substitution of the halides followed by cyclization and resin cleavage provides lactams such as I (x = single bond, CH2) in 17-62% yields and in >90% purities after chromatog. purification

A wide variety of lactams containing 5- and 6-membered rings are prepared using the triazole-linked Merrifield resin-bound esters, allowing for facile introduction of diversity into combinatorial libraries; 7-membered ring can be prepared if the linker contains conformational constraints such as a

benzene ring. A library of potential opioid receptor-binding compds. is prepared by this methodol. I (X = single bond), prepared from 6B-naltexamine and triazole-linked Merrifield resin-bound 2-bromomethylbenzoate, binds to the µ- opioid receptor with a Ki value of 1.6 mM, while I (X = CH2) (prepared analogously from n-bound 2-(bromomethyl)phenylacetate) binds to the same receptor with a Ki value of 56 mM. The electrostatic potential surfaces of some of the prepared compds. are determined by mol. mechanics calcns.

NT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

AN DN TI

ANSWER 2 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
2005:1144467 CAPLUS
144:51411
Potent and highly selective kappa opioid receptor agonists
incorporating chroman- and 2,3-dihydrobenzofuran-based constraints
chu, Guo-Hua; Gu, Minghua; Cassel, Joel A.; Belanger,
Serge: Graczyk, Thomas M.; DeHaven, Robert N.; Conway-James, Nathalie;
Koblish, Mike: Little, Patrick J.; DeHaven-Hudkins, Diane L.; Dolle,
Roland E.
Penertment of Chemistry, Adolog Corporation, Exten, PA, 19341, USA ΑU

Roland E. Department of Chemistry, Adolor Corporation, Exton, PA, 19341, USA Bioorganic & Medicinal Chemistry Letters (2005), 15(23), 5114-5119 CODEN: BMCLE8; ISSN: 0960-894X Elsevier B.V.

Journal English

Two chemical classes of kappa opioid receptor agonists, chroman-2-carboxamide derivs. and 2,3-dihydrobenzofuran-2-carboxamide derivs. e.g., I, were synthesized. These agents exhibited high and selective affinity for the kappa opioid receptor.

VI 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN 2005:431398 CAPLUS 142:463595

142:4633-3 Preparation of N-aminoalkyl amides as agonists of the K opioid receptor useful against gastrointestinal disorders, pain,

and pruritus Dolle, Roland E.; Chu, Guo-Hua; Gu, Minghua

IN PA SO USA U.S. Pat. Appl. Publ., 46 pp.

CODEN: USXXCO

Patent

English

| FAN. | CNT 1 | | | | | | | | | | | | | | | | |
|---------------------|---------------|------|------|-------------|-------------|------|----------------|-----------------|-----|-----|-----|----------------|----------|-----|-----|-----|-----|
| | PATENT NO. | | | | KIND | | DATE | | | | | | DATE | | | | |
| | | | | | | - | | | | | | - - | | | - | | |
| PI | US 2005107355 | | | A1 20050519 | | | US 2003-713746 | | | | | 20031114 | | | | | |
| | WO 2005049564 | | | | A1 20050602 | | | WO 2004-US37955 | | | | | 20041112 | | | | |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BW, | BY, | ΒZ, | CA, | CH, |
| | | CN, | co, | CR, | Cυ, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KP, | KR, | ĸz, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | ΜA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | sc, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | ТJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UΖ, | ۷C, | VN, | YU, | ZΑ, | ZM, | ZW |
| | RW: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | NΑ, | SD, | SL, | sz, | TZ, | UG, | ZM, | ZW, | AM, |
| | | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | TJ, | TM, | ΑT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FI, | FR, | GB, | GR, | ΗU, | IE, | IS, | IT, | LU, | MC, | NL, | PL, | PT, | RO, |
| | | SE, | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, |
| | | NE, | SN, | TD, | TG | | | | | | | | | | | | |
| PRAI US 2003-713746 | | | | Α | | 2003 | 1114 | | | | | | | | | | |
| OS | MAR PAT | 142: | 4635 | 95 | | | | | | | | | | | | | |

$$z \xrightarrow[R4]{\stackrel{R^2}{\underset{R^3}{\bigcap}}} {\stackrel{N^2}{\underset{N}{\bigcap}}} {\stackrel{N^2}{\underset{N}{\bigcap}}} {\stackrel{N^2}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\underset{N}{\bigcap}}} {\stackrel{R^2}{\underset{N}{\underset{N}{\longrightarrow}}} {\stackrel{R^2}{\underset{N}{\underset{N}{\longrightarrow}}} {\stackrel{R}{\underset{N}{\longrightarrow}}} {\stackrel{R^2}{\underset{N}{\longrightarrow}}} {\stackrel{R^2}{\underset{N}{\underset{N}{\longrightarrow}}} {\stackrel{R}{\underset{N$$

Amide derivs. (shown as I and II; variables defined below; e.g. N-[2-(S)-3-hydroxypyrcolidin-1-y1)-(S)-1-phenylethyl]-N-methyl-2-phenylaminoacetamide (shown as III)) are disclosed. Pharmaceutical compns. containing these compds., and methods for their use, inter alia,

treating and/or preventing gastrointestinal disorders, pain, and pruritus (no data) are also disclosed. Although the methods of preparation are

- L10 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) claimed, 36 example prepns. are included. For example, III was prepd.
- b) by coupling of N-phenylglycine with -{(s)-3-hydroxypyrrolidin-1-y1}-(S)-1-phenylethyl)-N-methylamine dihydrochloride. For I and II: Rl is H or OH: Ra is alkyl; R2 is alkyl, aryl, or aralkyl; R3 is alkyl, or R2 and R3 taken together with the atoms through which they are connected form a 4- to 8-membered heterocyclic ring; R4 is H, alkyl, cycloalkyl, alkylcycloalkyl, aryl, aralkyl, heteroaryl, or heteroarylalkyl; 2 is -(CH2)oNRSR6 or -(CH2)oKTR8; R5 is H, alkyl, or aryl; R6 is aryl, alkaryl, -CO(NH)pR9, or -SO2R9, provided that at least one of R5 and R6
- other than aryl; R7 is H or alkyl; R8 is alkyl, aryl, aralkyl, alkaryl, heteroaryl, heteroarylalkyl, cycloalkyl or cycloalkylalkyl; R9 is alkyl, cycloalkyl, alkylcycloalkyl, aryl, aralkyl, heteroaryl, or heteroarylalky; mis the integer 1, 2, or 3; n is the integer 1, 2, or
- o is the integer 0, 1, 2, or 3; p is the integer 0 or 1; and the quantity (m*n) is an integer 2-5. Compds. in all the examples showed κ receptor affinity (ki) <10 μ M. For example, III had a Ki = 0.17 nM against the human κ receptor with >100+ selectivity vs. the human μ and 8 receptors and was an agonist with an EC50 = 0.05 nM. It exhibited a % A = 96.2% at a dose of 300 μ g, 1.paw in the in vivo formalin-induced nociception assay. This compd. also blocked the action of HOAc-induced writhing when administered s.c. with an ED50 = 0.017 mg/kg.

L10 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

$$Q^{3} = R^{5} \xrightarrow{R^{4}} Q$$

$$Q^{4} = R^{5} \xrightarrow{R^{4}} Q$$

$$Q^{4} = R^{5} \xrightarrow{R^{4}} Q$$

$$R^{6} \xrightarrow{R^{7}} Q^{4} = R^{5} \xrightarrow{R^{4}} Q$$

$$R^{6} \xrightarrow{R^{7}} Q^{4} = R^{5} \xrightarrow{R^{4}} Q$$

$$R^{6} \xrightarrow{R^{7}} Q^{4} = R^{5} \xrightarrow{R^{4}} Q$$

- Title compds. [1, R1 = H, OH; R2 = alkyl, aralkyl, aryl, R3 = alkyl, aralkyl; Q1, Q2 = (CH2)1-2; Z = Q3, Q4; Q = O, CH2, NR8; J = (CH2)4, C(CH2)k-1, CH:CHCH2, CABCH2; k = 1-3; A = H, B = H, alkyl; AB = O, CH2; R4-R7 = H, alkyl, halo, aryl, heteroaryl, OH, NO2, cyano, CF3, CF2-CG7, CC73, ctc.; R8 = H, alkyl, acyl), were prepared Thus, title compound
- (II) (preparation outlined) blocked acetic acid-induced writhing with ED50 = 0.53
- mg/kg s.c.

 RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
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| L10 AN | ANSWER 5 OF 8 CAPLUS 2005:220129 CAPLUS | US COPYRIGHT 20 | 06 ACS on STN | | | | | | | |
|------------|--|------------------|---------------------------|-------------|--|--|--|--|--|--|
| DN | 142:298013 | | | | | | | | | |
| TI | Preparation of pyrre | olidinylphenethy | l benzoxepine-, | | | | | | | |
| | tetrahydronaphthalen | ne-, chroman-, a | nd benzofurancarboxamides | 3 85 K- | | | | | | |
| | opioid agonists. | | | | | | | | | |
| IN | Dolle, Roland E.; Chu, Guo-Hua | | | | | | | | | |
| PA | Adolor Corporation, USA | | | | | | | | | |
| so | U.S. Pat. Appl. Publ., 81 pp. | | | | | | | | | |
| | CODEN: USXXCO | | | | | | | | | |
| DT | Patent | | | | | | | | | |
| LA | English | | | | | | | | | |
| FAN. | AN. CNT 1 | | | | | | | | | |
| | PATENT NO. | KIND DATE | APPLICATION NO. | DATE | | | | | | |
| | | | | | | | | | | |
| PI | US 2005054630 | A1 20050310 | US 2003-651197 | 20030828 | | | | | | |
| | | B2 20060425 | | | | | | | | |
| | WO 2005023799 | A1 20050317 | WO 2004-US27307 | 20040820 | | | | | | |
| | | AM. AT. AU. AZ. | BA, BB, BG, BR, BW, BY, | BZ. CA. CH. | | | | | | |
| | | | DM, DZ, EC, EE, EG, ES, | | | | | | | |
| | | | IN, IS, JP, KE, KG, KP, | | | | | | | |
| | | | MD, MG, MK, MN, MW, MX, | | | | | | | |
| | | | RO, RU, SC, SD, SE, SG, | | | | | | | |
| | | | UG, US, UZ, VC, VN, YU, | | | | | | | |
| | | | NA, SD, SL, SZ, TZ, UG, | | | | | | | |
| | | | TM, AT, BE, BG, CH, CY, | | | | | | | |
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| | | | CI, CM, GA, GN, GQ, GW, | | | | | | | |
| | SN. TD. TG | DI, DO, CI, CO, | c1, an, an, an, og, an, | ,,, | | | | | | |
| DDAT | us 2003-651197 | A 20030828 | | | | | | | | |
| OS | MARPAT 142:298013 | . 20050020 | | | | | | | | |
| V 3 | PARENT 112:230013 | | | | | | | | | |

ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN 2004:1080691 CAPLUS 142:56168 Preparation of sulfonylamino pyrrolidinylethyl phenylacetamide derivatives and their opioid receptor binding affinity Le Bourdonnec, Bertrand; Ajello, Christopher William; Dolle, Roland E. E. BOURDONNEC, BETTERROR AJEL
E. PA Adolor Corporation, USA
SO U.S. Pat. Appl. Publ., 28 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DA DATE APPLICATION NO. DATE

PATENT NO. KIND DATE APPLI
PI US 2004254156 A1 20041216 US 20
US 6992193 B2 20050131
WO 2005004796 A2 20050120 WO 20
WO 2005004796 A3 20050428
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ,
GE, GH, GM, HR, HU, ID, IL, IN, IS,
LK, LR, LS, LT, LU, LV, HA, MD, MG,
NO, NZ, OM, PG, PH, PL, PT, RO, RU,
TJ, TM, TN, TR, TT, TZ, UA, UG, US,
RW: BW, GM, GM, KE, LS, MW, MZ, NA, SD,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT,
EE, ES, FI, FR, GB, GR, HU, IE, IT,
SI, SK, TR, BF, BJ, CF, CG, CI, CM,
SN, TD, TG

PRAI US 2003-458135 A 20030610
GI US 2003-458135 20030610 BG, BR, EC, EE, JP, KE, MK, MN, SC, SD, UZ, VC, SL, SZ, BE, BG, LU, MC, GA, GN, BW, EG, KG, MW, SE, VN, TZ, CH, NL, GQ, BY, ES, KP, MX, SG, YU, UG, CY, PL, GW,

AB The authors prepared the title compds. I $\{R1 = H, OH, R2 = alkyl, aryl, R3 =$ H, alkyl, R2R3 = heterocyclyl,,R4 = H, alkyl, R5 = alkyl, aryl,

10/713,746 Page 18

Patent English

LIO ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:878146 CAPLUS
DN 141:366142
Preparation of lactams for use in pharmaceutical compositions as kopioid receptor agonists
Dolle, Roland E.; Tuthill, Paul Anson
PA Adolor Corporation, USA
U.S. Pat. Appl. Publ., 24 pp.
CODEN: USXXCO
PA 181

L10 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) heterocycloalkyl, X = (CH2)n, n = 0, 1] and tested them for the ability

heterocycloalkyl, X = (CH2)n, n = 0, 1] and tested them for the ability inhibit the binding of non-selective opioid antagonist, [3H]diprenorphine, to the cloned human μ , κ , and δ opioid receptors. To illustrate the prepn. method, 4-BrcSH4CH2CO2H was esterified to the Me ester, which was subsequently converted to the nitrile, reduced to the amine, and N-protected with Boc2O. This Boc-protected compd. was then hydrolyzed to the acid and coupled with (S)-pyrrolidinylamine II to give amide III (R = New Mercolyzed). The summarize the activity, the compds. (1) bind with high affinity to κ opioid receptors; (2) display good opioir receptor selectivity of κ vs. μ and κ vs. δ ; and (3) do not substantially inhibit cytochrome P 450 enzymic activity, in particular CYP2D6, CYP2C9 and CYP3A4.

NT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Lactam derivs., such as I [R = alkyl, aryl; R1 = H, OH; X = CH2, (CH2)2,

ANSWER 7 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) OCH2; Y = bond, O], were prepd. for therapeutic use as K-opioid receptor agonists which are useful for treatment of pruritic dermatosis, allergic dermatitis, atopy, contact dermatitis, psoriasis, eczema, opioid-induced pruritus, insect bites, cerebral edema and oxygen supply deficiency of the central nervous system and for inducing diuresis. Pharmaceutical compns. contg. the prepd. lactams and methods for their use were also disclosed. Thus, lactam II was prepd. via a multistep synthetic sequence which started from (5)-PhCH(NH2)CO2H, pyrrolidine and RZSO2-3-C6H4CH(CH2CH:CH2)CO2H (R2 = 1-pyrrolidinyl) and which included a metathesis ring closure of the corresponding N-allyl-amide, RZSO2-3-C6H4CH(CH2CH:CH2)CN(EM2CH:CH2)CH(Ph)CHM2 (R2 = 1-pyrrolidinyl). The prepd. lactams were assayed for analgesic activity and for µ-, 8- and K- opioid receptor binding activity.

NT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 8 CAPLUS COPYRIGHT 2006 ACS on STN 2004:863130 CAPLUS 142:56151

142:56151
Azepinone as a conformational constraint in the design of kopioid receptor agonists
Tuthill, Paul A.; Seida, Pamela R.; Barker, William; Cassel, Joel A.;
Belanger, Serge; Deflaven, Robert N.; Koblish, Michael; Gottshall, Susan
L.; Little, Patrick J.; DeHaven-Hudkins, Diane L.; Dolle, Roland

E. Adolor Corporation, Department of Chemistry, Exton, PA, 19341, USA Bioorganic & Medicinal Chemistry Letters (2004), 14(22), 5693-5697 CODEN: BMCLE8; ISSN: 0960-894X Elsevier B.V. Journal English CASREACT 142:56151

10/713,746 Page 19

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FILE 'CAPLUS' ENTERED AT 15:10:27 ON 02 AUG 2006 STRUCTURE UPLOADED 1.1

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FILE 'REGISTRY' ENTERED AT 15:10:50 ON 02 AUG 2006 L*** DEL 0 S L1

FILE 'CAPLUS' ENTERED AT 15:10:51 ON 02 AUG 2006 0 S L2 L*** DEL

FILE 'REGISTRY' ENTERED AT 15:11:27 ON 02 AUG 2006

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FILE 'CAPLUS' ENTERED AT 15:12:02 ON 02 AUG 2006

1.4 12 SEA ABB=ON PLU=ON L3 D 1-12 BIB ABS HITSTR E DOLLE ROLAND/AU

174 SEA ABB=ON PLU=ON ("DOLLE ROLAND E"/AU OR "DOLLE ROLAND E L5 III"/AU OR "DOLLE ROLAND E JR"/AU OR "DOLLE ROLAND ELLWOOD"/AU OR "DOLLE ROLAND ELLWOOD III"/AU)

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12 SEA ABB=ON PLU=ON "GU MINGHUA"/AU
196 SEA ABB=ON PLU=ON L5 OR L6 OR L7
31 SEA ABB=ON PLU=ON L8 AND OPIOID
8 SEA ABB=ON PLU=ON L9 AND PYRROLID? L10

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FILE CAPLUS

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Structure attributes must be viewed using STN Express query preparation.

L3 62 SEA FILE=REGISTRY SSS FUL L1

L4 12 SEA FILE=CAPLUS ABB=ON PLU=ON L3

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